

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :		
Product line	: Rolled Steel NEMA Premium Efficiency Three-Phase	
Product code :	12751143	
Catalog # :	003180T3E182T-SG	
Frame	: 182/4T	
Insulation class	: F	
Duty cycle	: Cont.(S1)	
Ambient temperature	: -20°C to +40°C	
Altitude	: 1000 m.a.s.l.	
Design	: B	
Cooling method	: IC01 - ODP	
Mounting	: F-1	
Rotation ¹	: Both (CW and CCW)	
Starting method	: Direct On Line	
Approx. weight ²	: 31.6 kg	
Moment of inertia (J)	: 0.0130 kgm ²	
Output [HP]	3	
Poles	4	
Frequency [Hz]	60	
Rated voltage [V]	230/460	
Rated current [A]	7.72/3.86	
L. R. Amperes [A]	64.8/32.4	
LRC [A]	8.4x(Code K)	
No load current [A]	4.14/2.07	
Rated speed [RPM]	1765	
Slip [%]	1.94	
Rated torque [kgfm]	1.23	
Locked rotor torque [%]	220	
Breakdown torque [%]	330	
Service factor	1.15	
Temperature rise	80 K	
Locked rotor time	27s (cold) 15s (hot)	
Noise level ²	55.0 dB(A)	
Efficiency (%)	25%	86.4
	50%	87.5
	75%	88.5
	100%	89.5
Power Factor	25%	0.35
	50%	0.60
	75%	0.73
	100%	0.80
Bearing type	: <u>Drive end</u> 6206 ZZ <u>Non drive end</u> 6205 ZZ	
Sealing	: Without Without Bearing Seal Bearing Seal	
Lubrication interval	: - -	
Lubricant amount	: - -	
Lubricant type	: Mobil Polyrex EM	
Foundation loads	Max. traction : 71 kgf Max. compression : 103 kgf	
Notes USABLE @208V 8.54A SF 1.00 SFA 8.54A		
This revision replaces and cancel the previous one, which must be eliminated. (1) Looking the motor from the shaft end. (2) Measured at 1m and with tolerance of +3dB(A). (3) Approximate weight subject to changes after manufacturing process. (4) At 100% of full load.		
These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.		
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



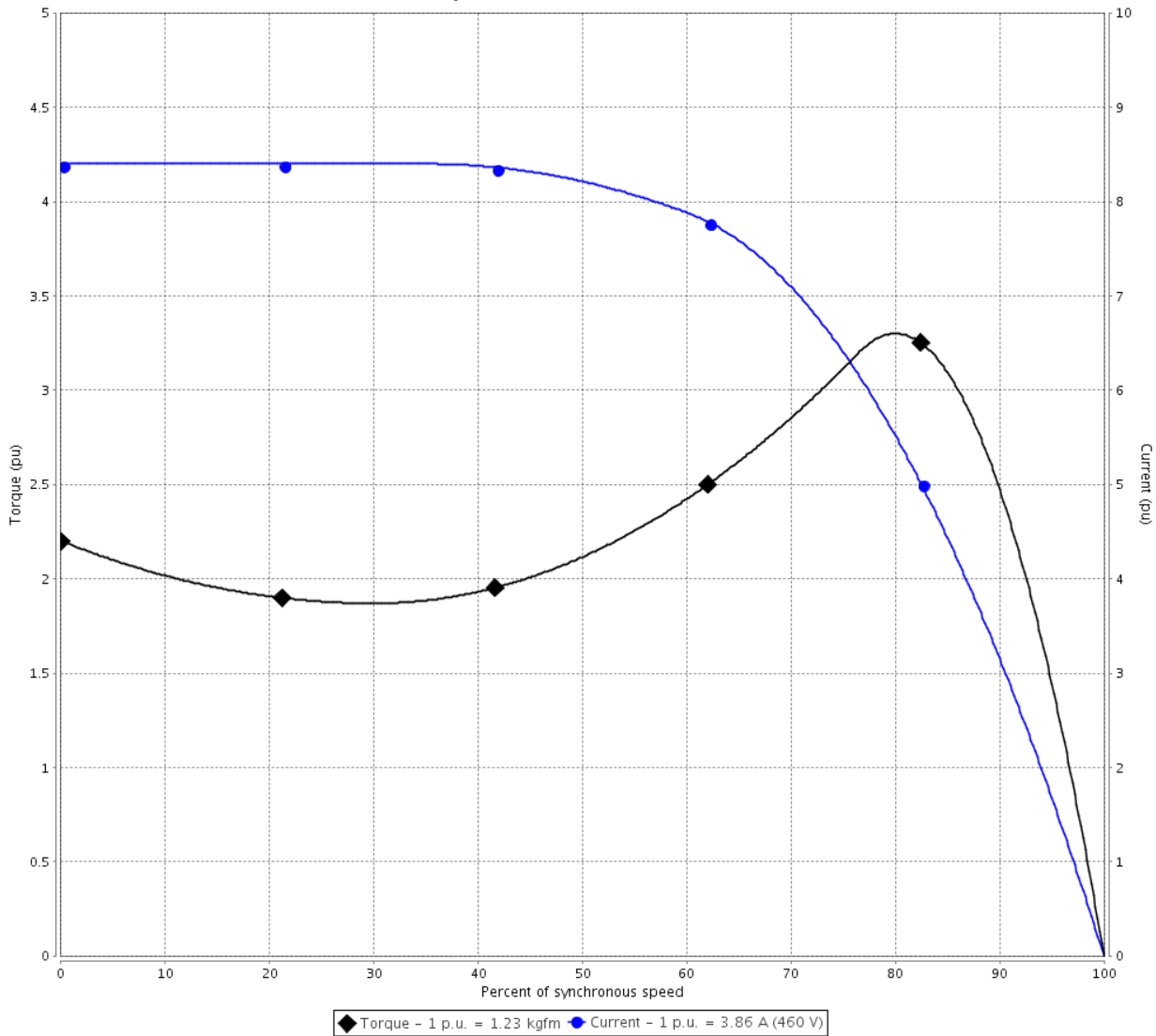
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 4P

Rated current : 7.72/3.86 A
 LRC : 8.4
 Rated torque : 1.23 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 330 %
 Rated speed : 1765 rpm

Moment of inertia (J) : 0.0130 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Locked rotor time : 27s (cold) 15s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



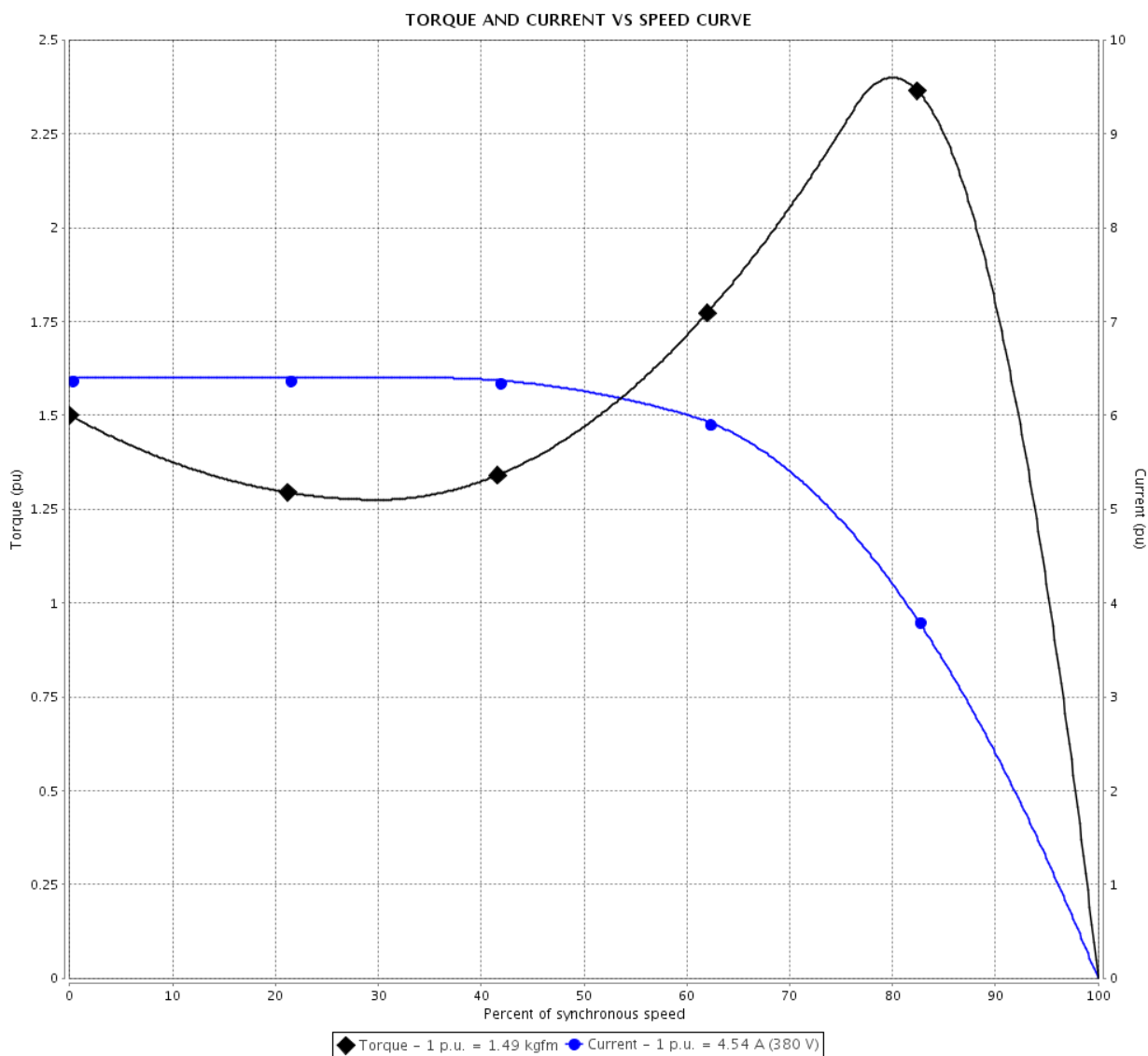
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Customer :

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Catalog # : 00318OT3E182T-SG



Performance : 190/380 V 50 Hz 4P

Rated current : 9.08/4.54 A
 LRC : 6.4
 Rated torque : 1.49 kgfm
 Locked rotor torque : 150 %
 Breakdown torque : 240 %
 Rated speed : 1460 rpm

Moment of inertia (J) : 0.0130 kgm²
 Duty cycle : Cont.(S1)
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 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Locked rotor time : 0s (cold) 0s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

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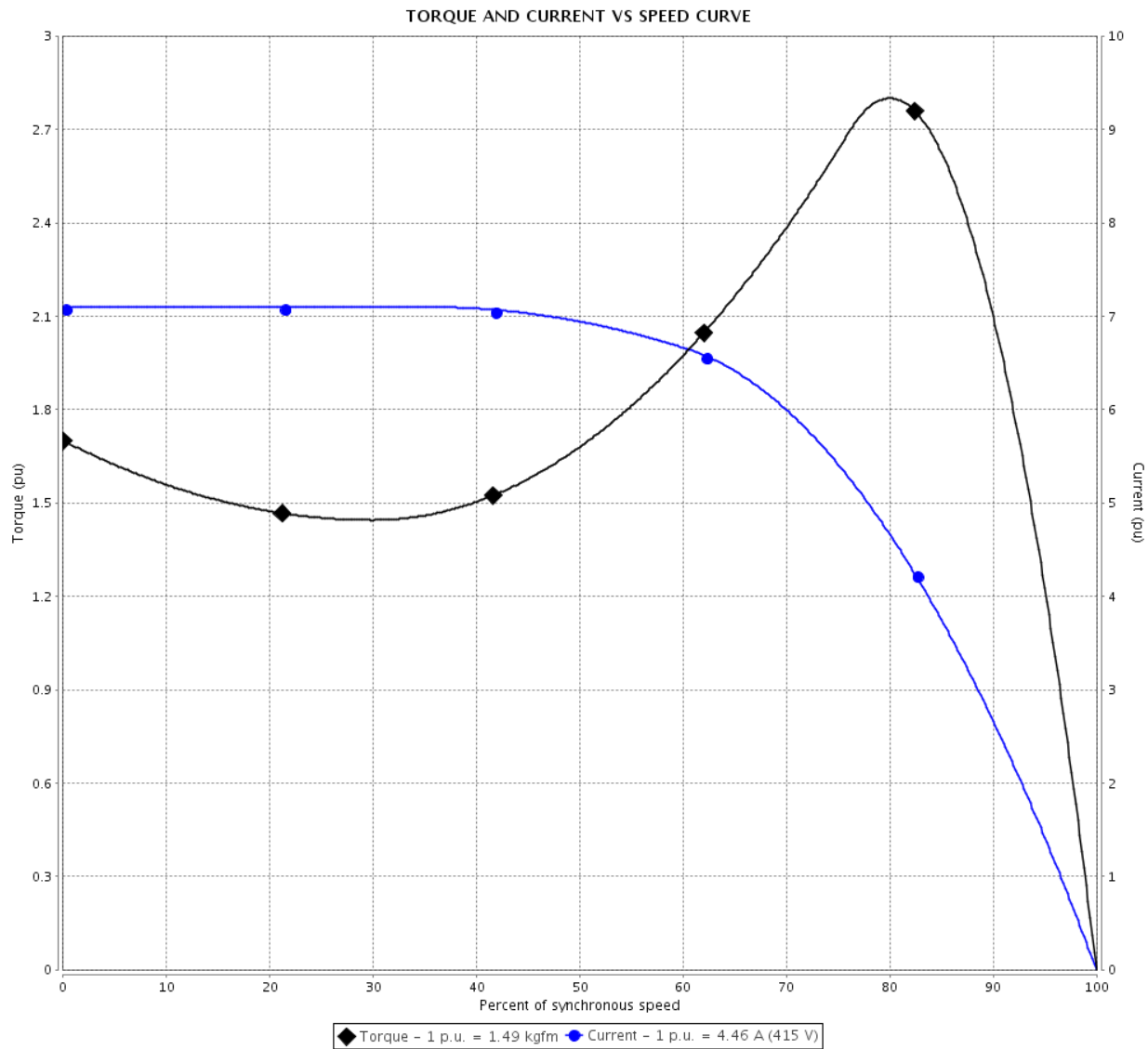


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Performance : 220/415 V 50 Hz 4P

Rated current : 8.41/4.46 A
 LRC : 7.1
 Rated torque : 1.49 kgfm
 Locked rotor torque : 170 %
 Breakdown torque : 280 %
 Rated speed : 1465 rpm

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LOAD PERFORMANCE CURVE

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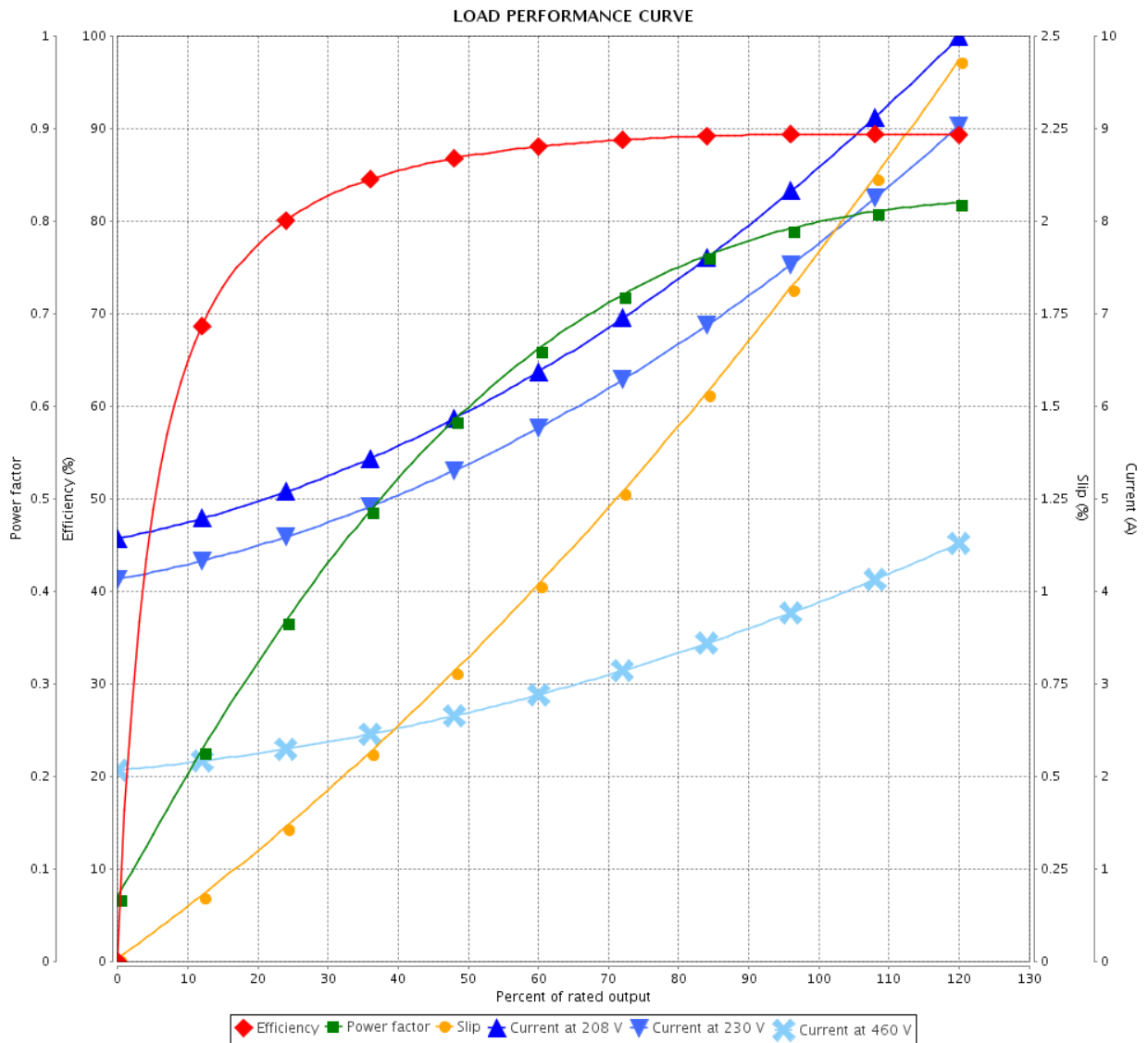


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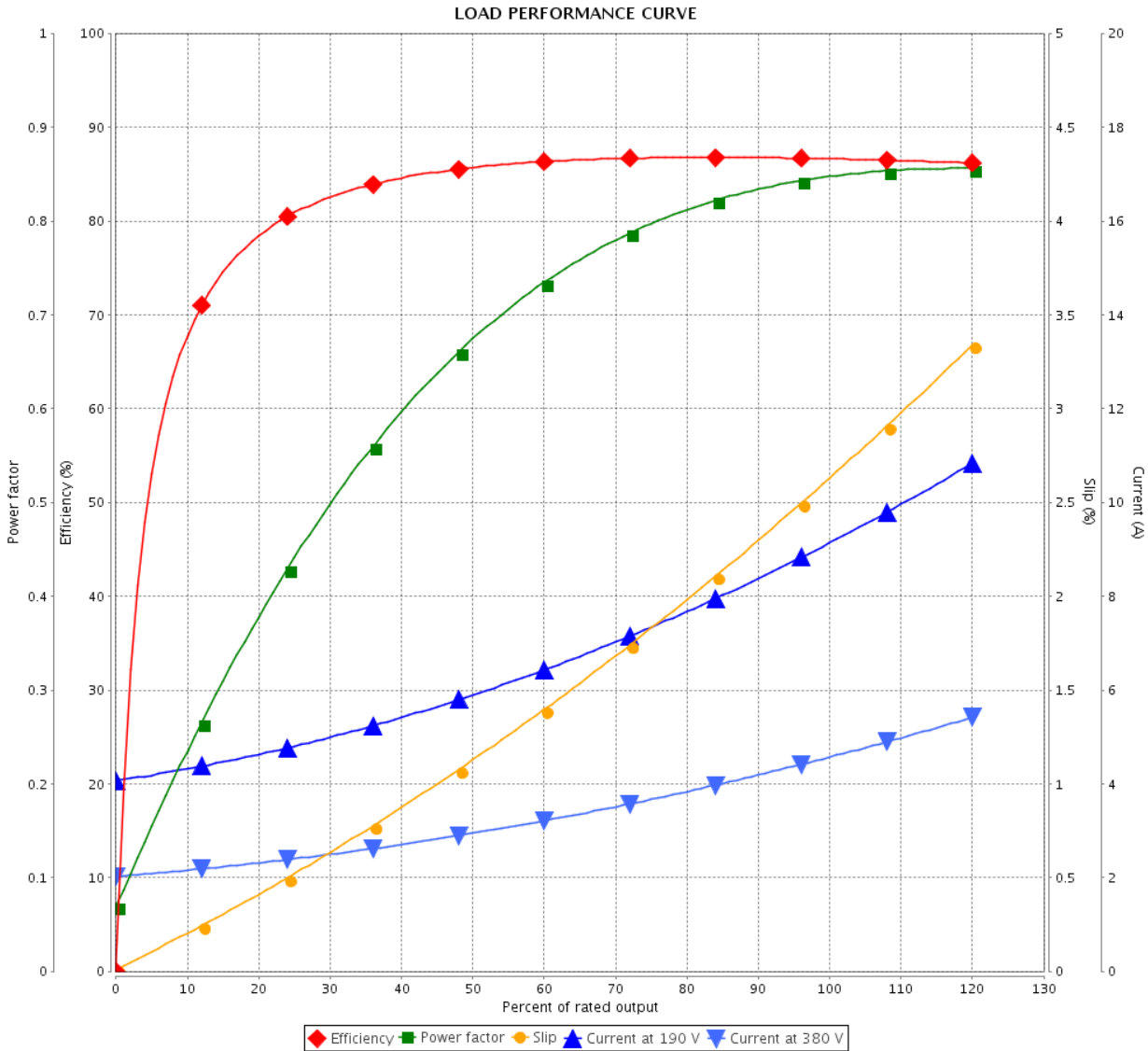


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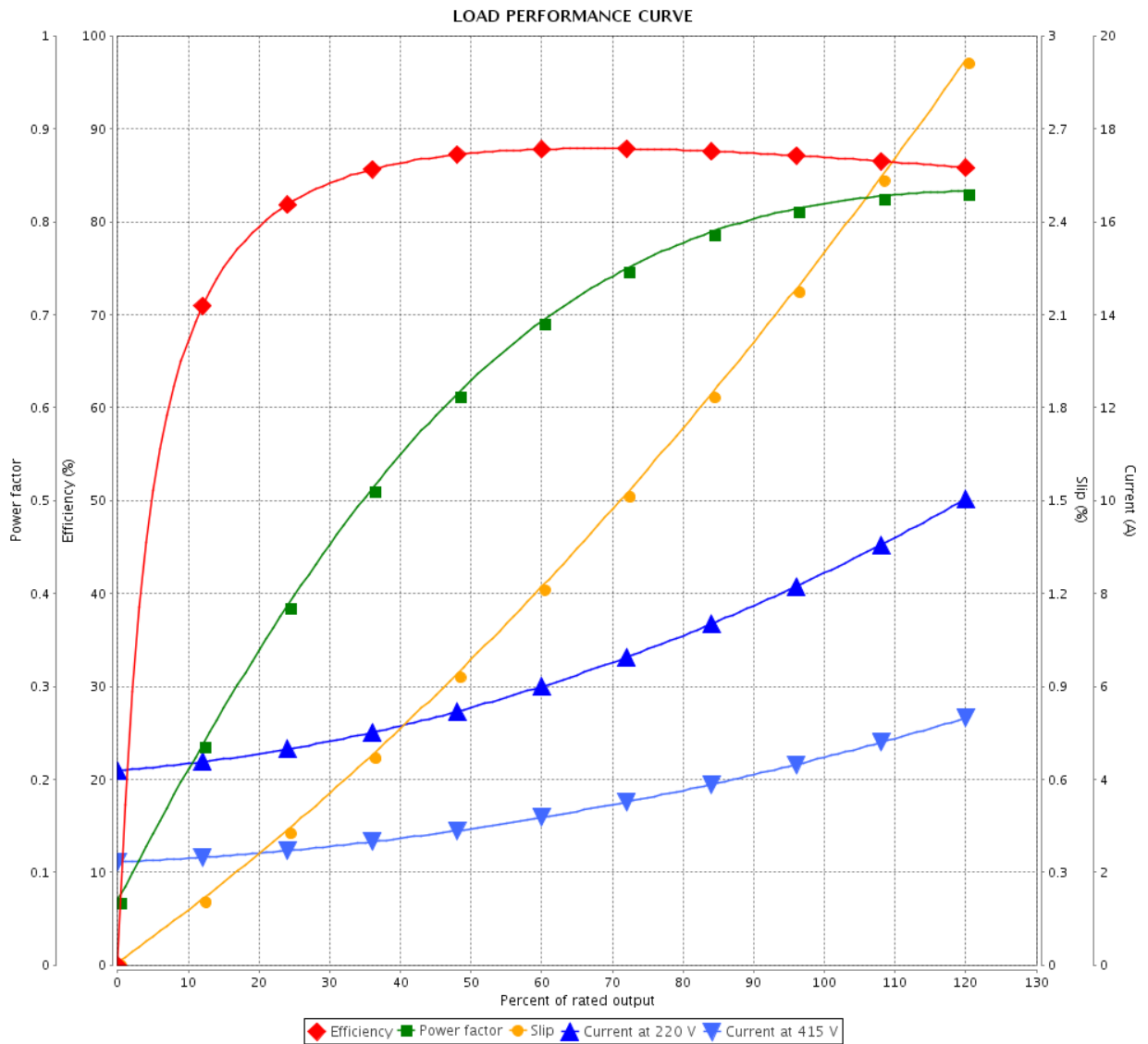


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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

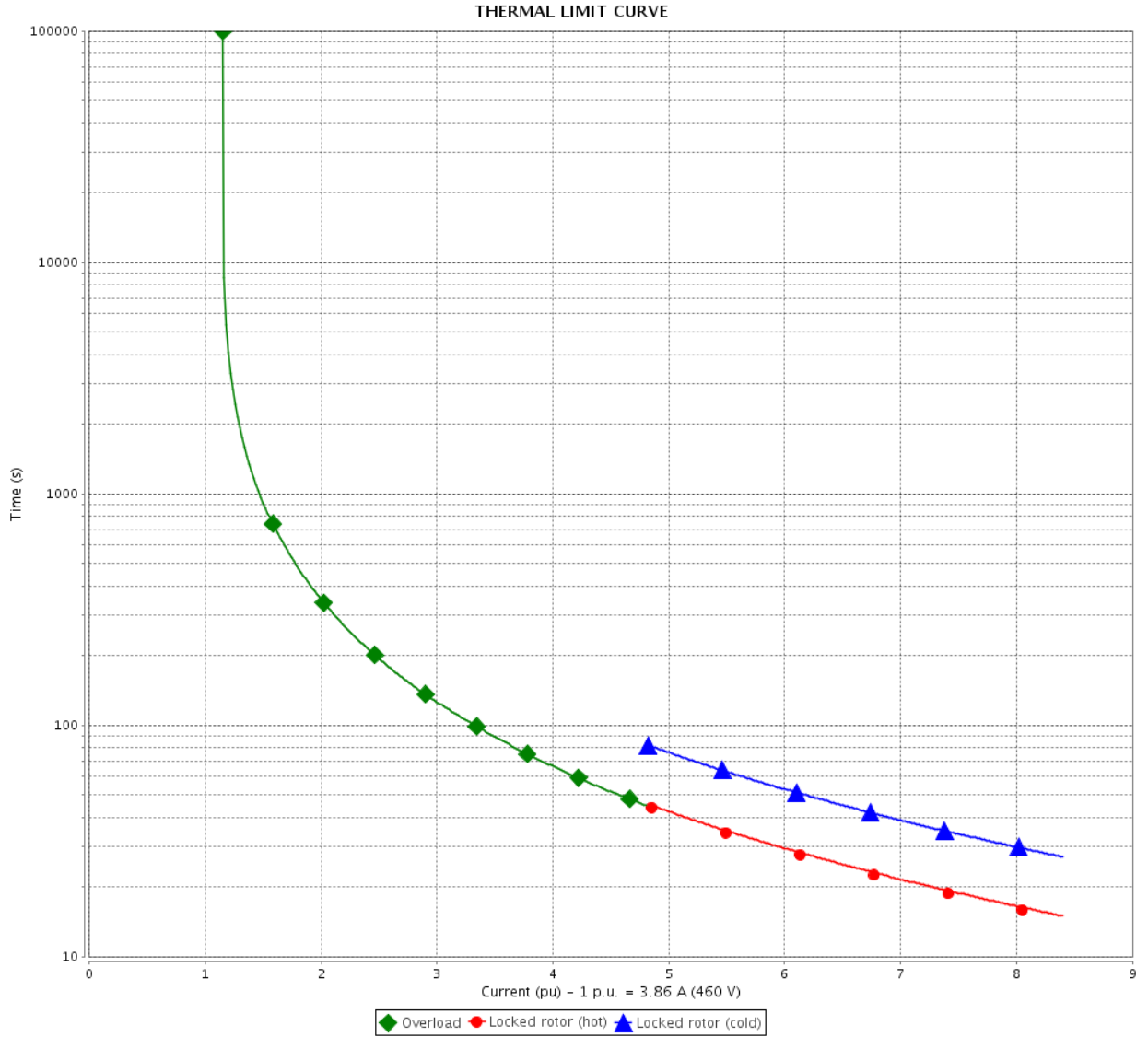
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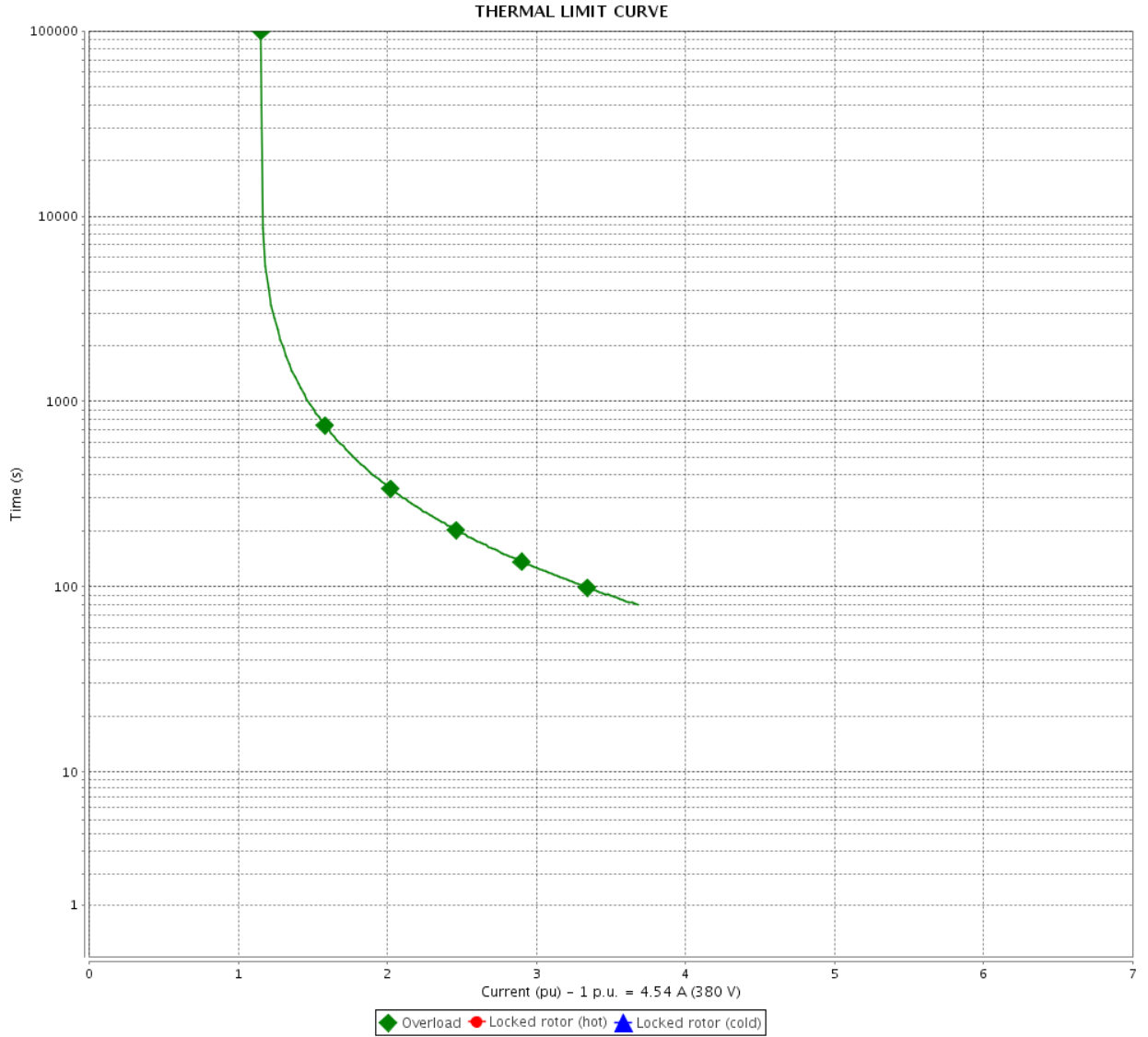
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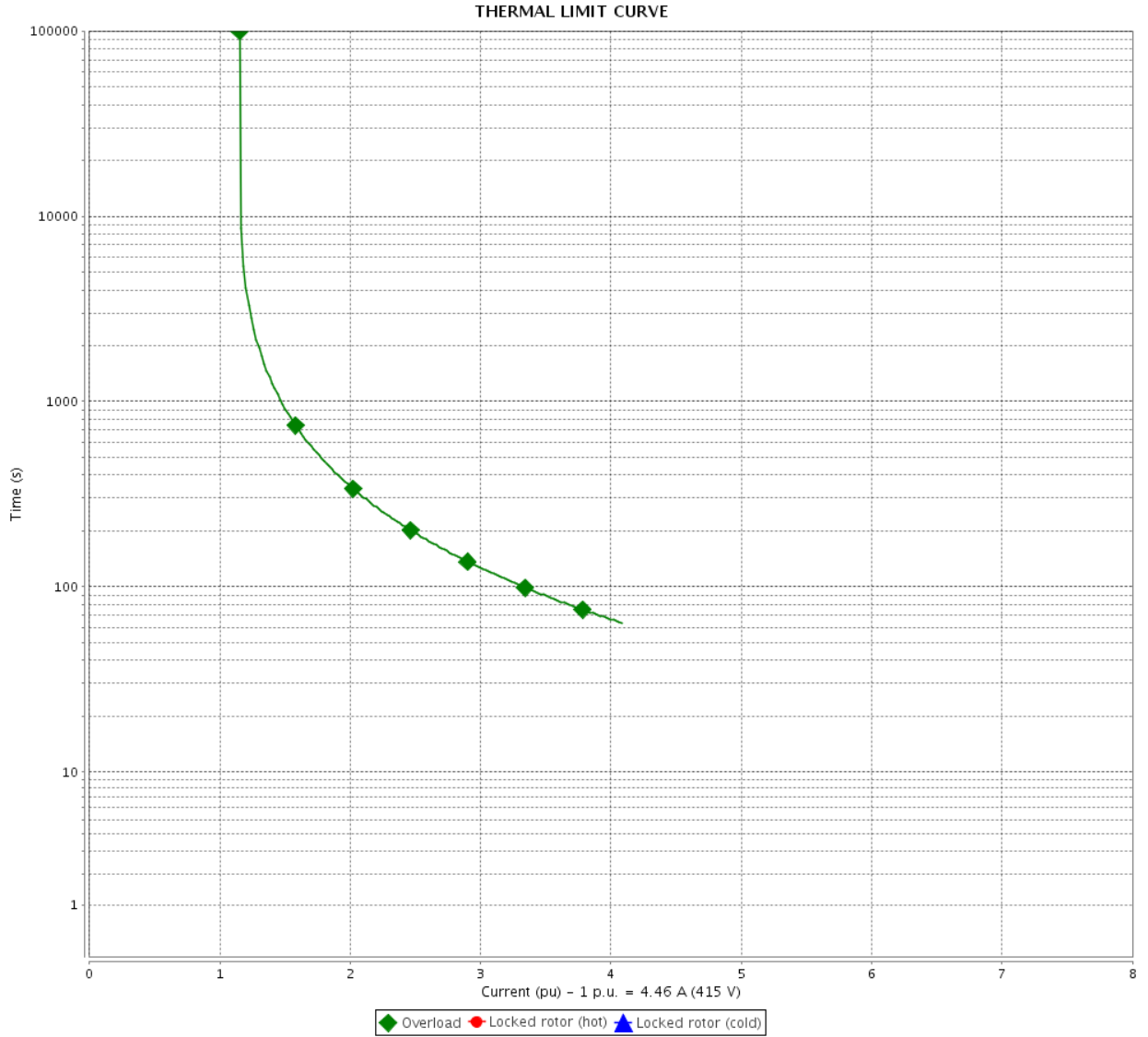
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VFD OPERATION CURVE

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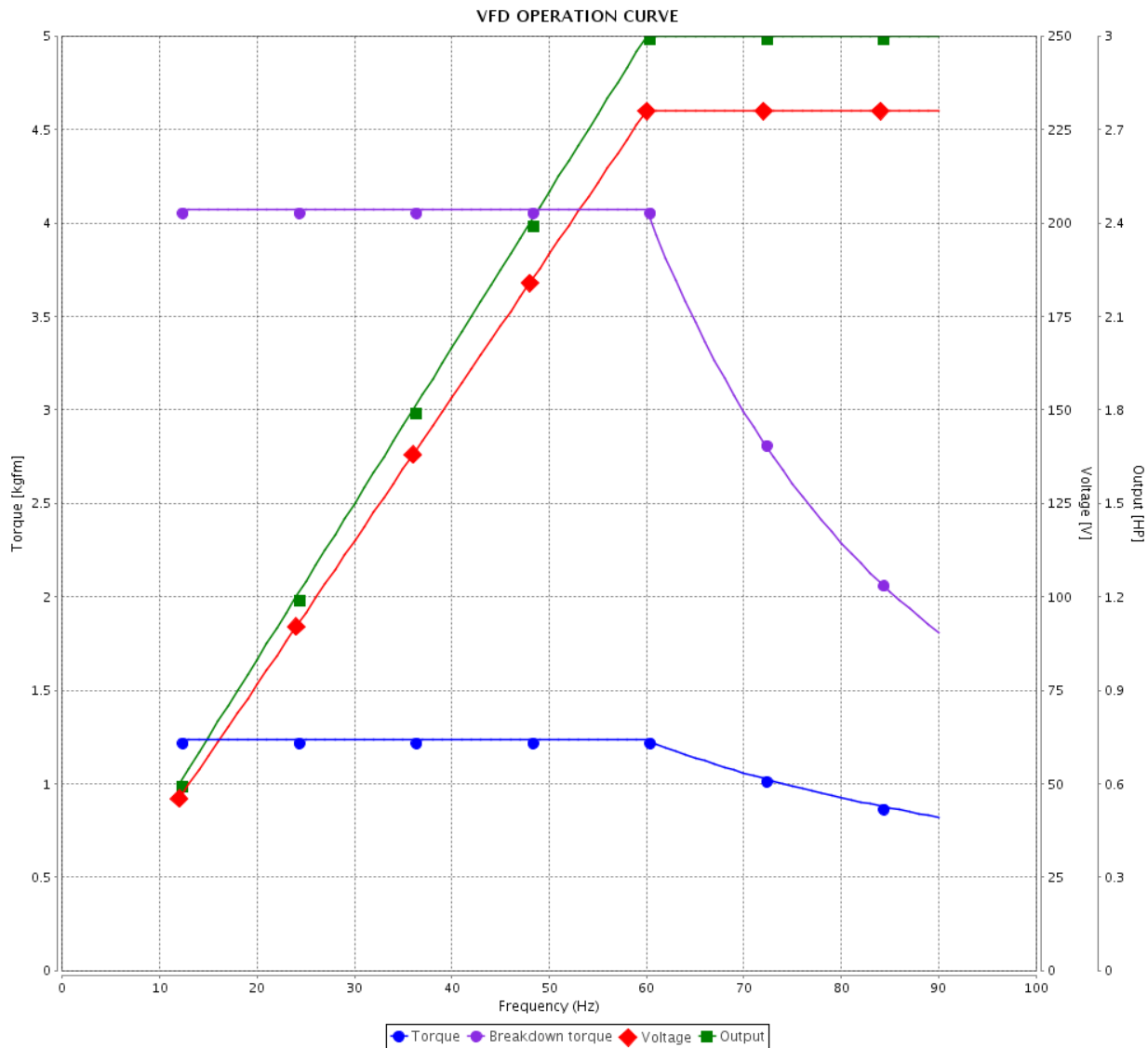


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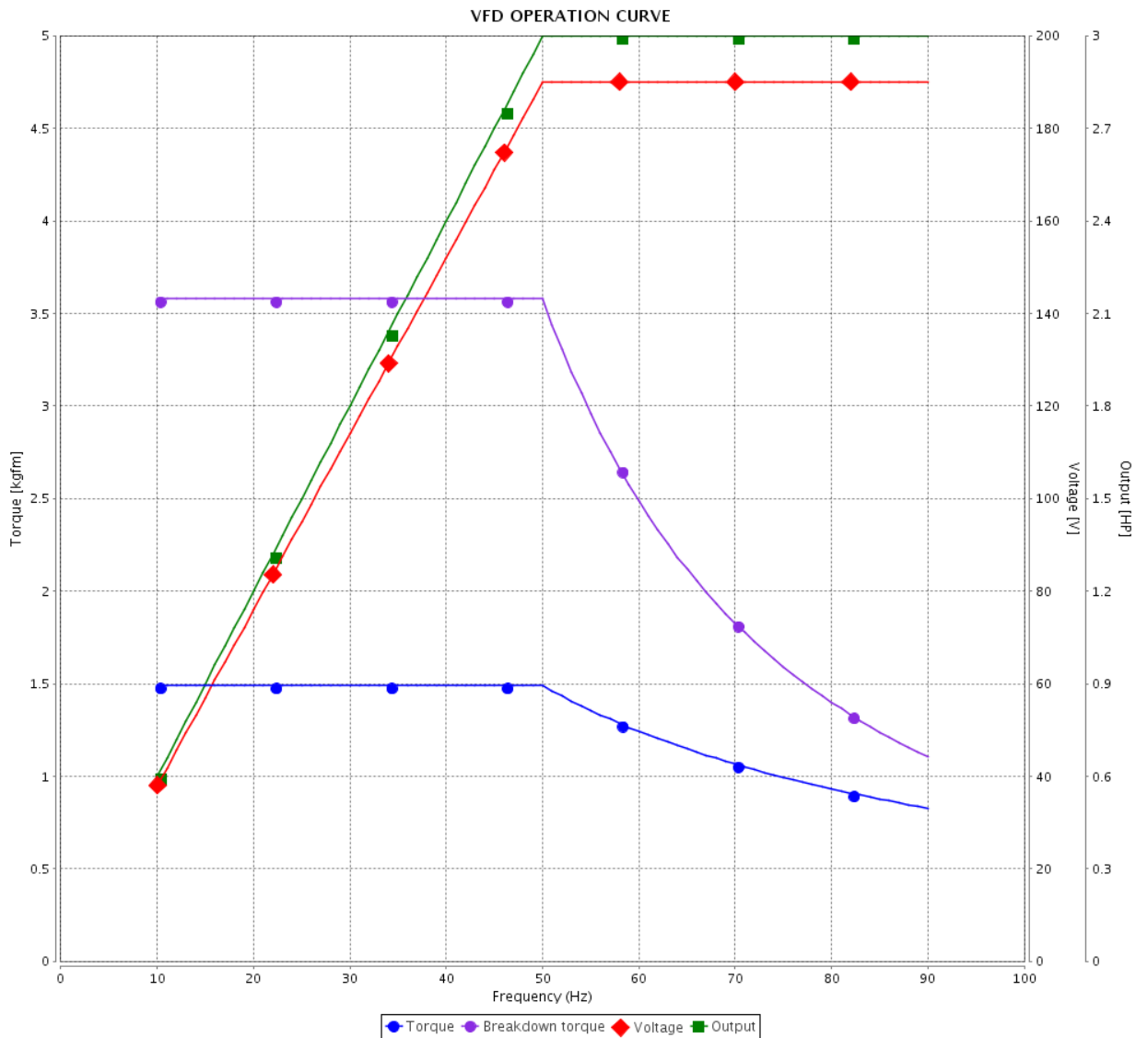


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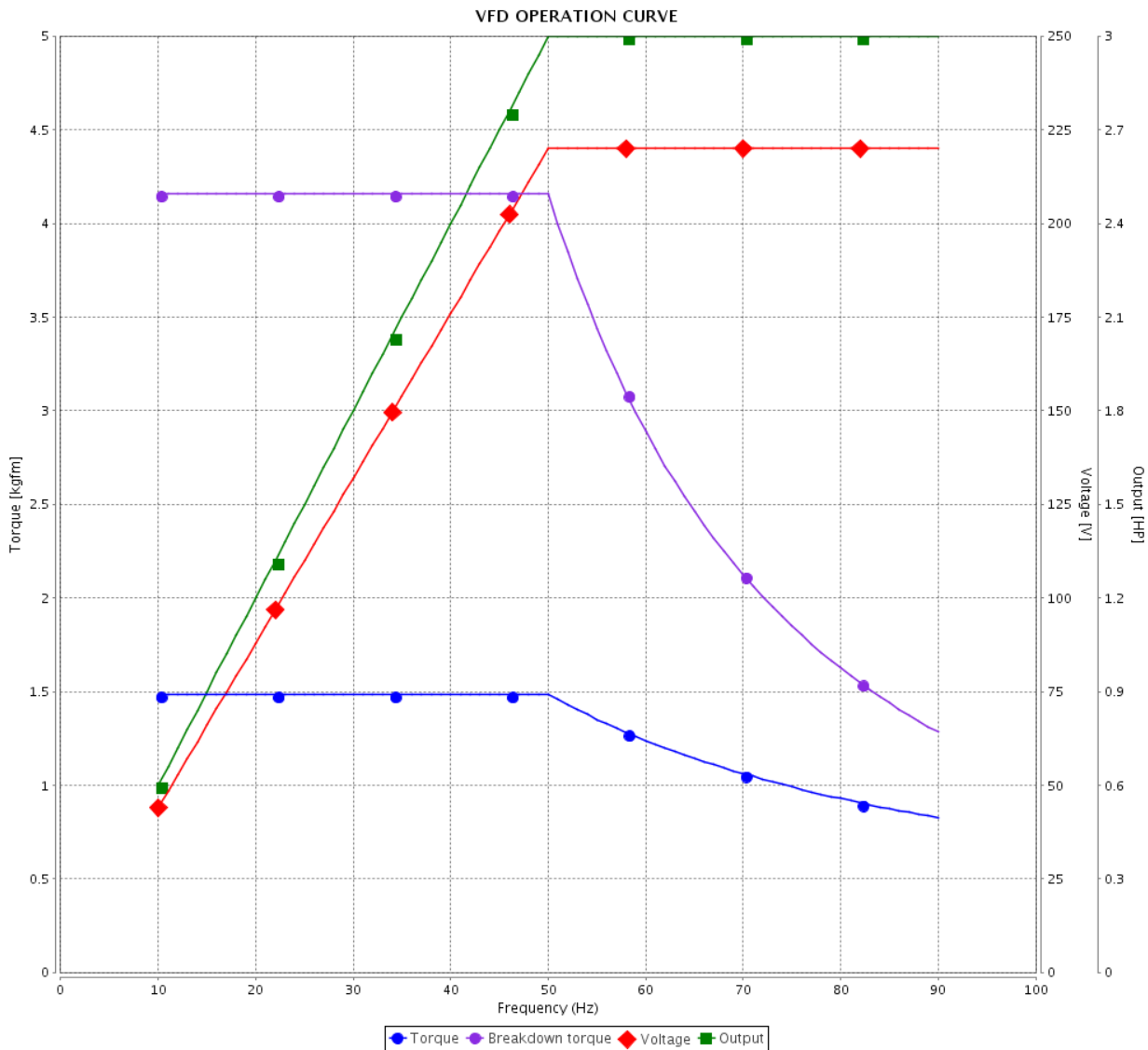


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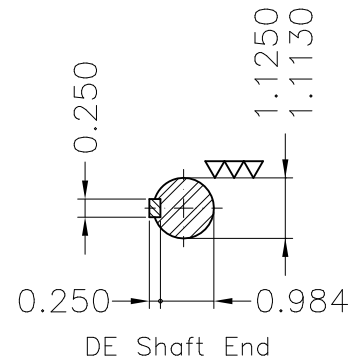
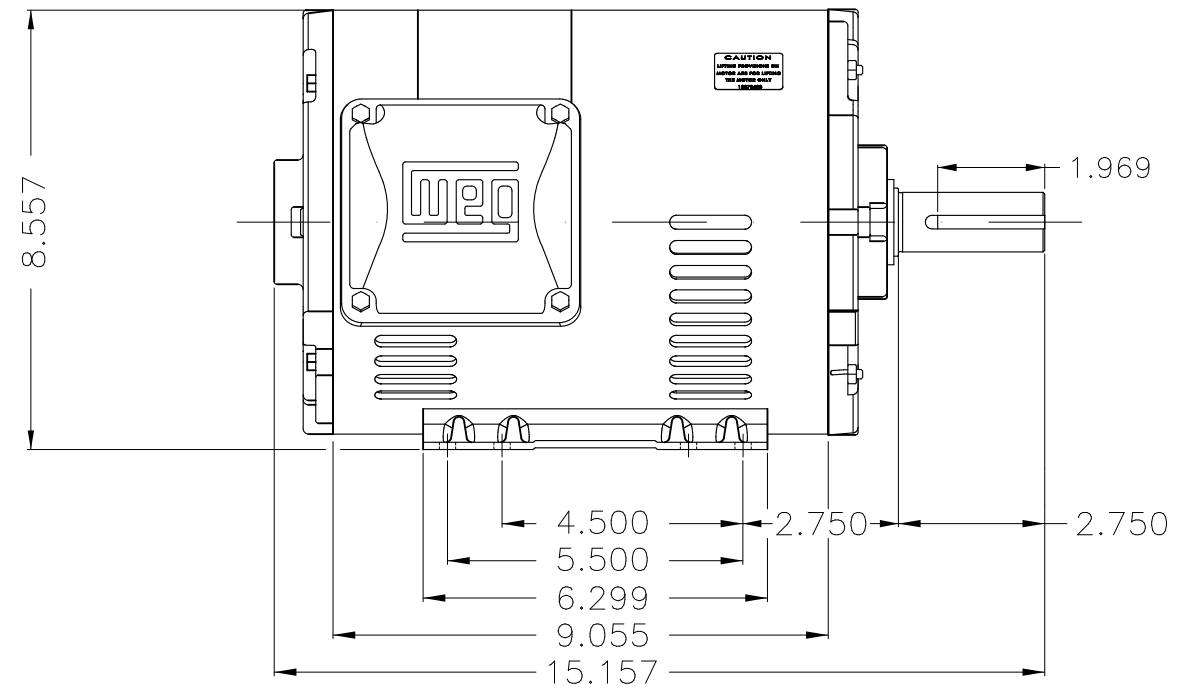
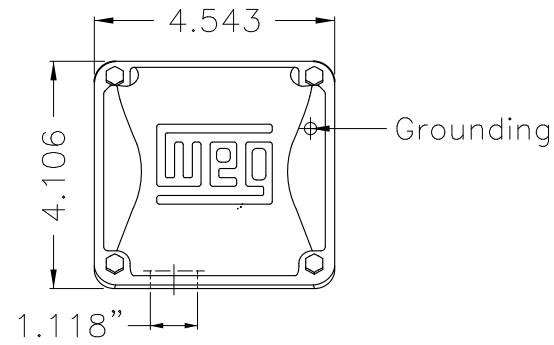
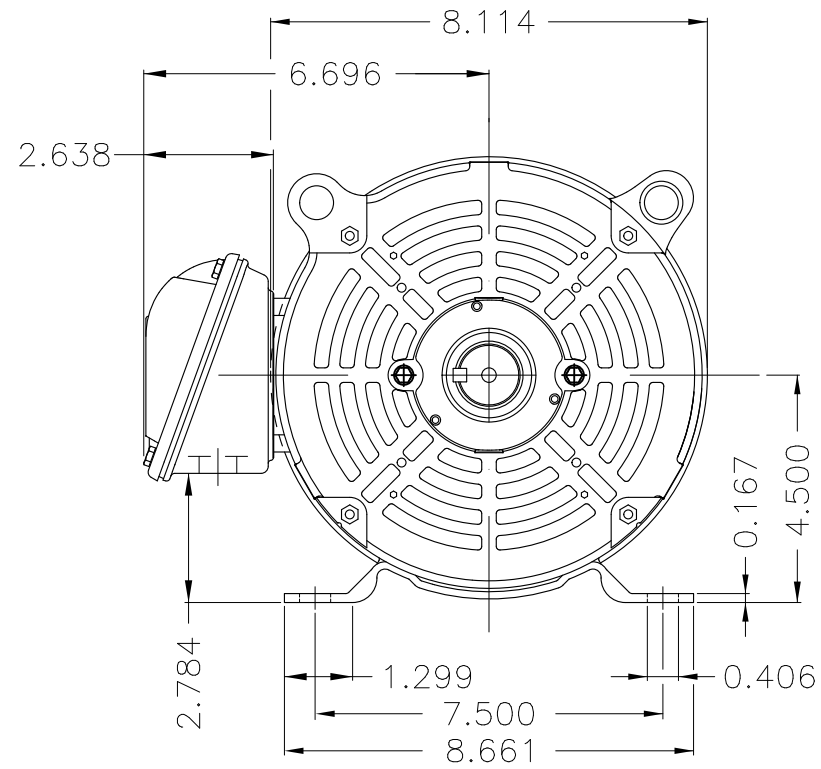
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EIXO
 PADRÃO
 OPCIONAL
 ESPECIAL

Dimensões em polegada
 Dimensions in inches

THIS IS AN UPDATED REVISION, THE PREVIOUS ONE MUST BE DISREGARDED.



Internal AEGIS ground ring on the DE
 Bearing cap
 Color Munsell N 1 matte black
 Painting plan 207N
 Mounting F-1/B3R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	USERADMIN	THREE P. MOTOR OPEN ROLLED STEEL NEMA PREM					
CHECKED		FRAME 182/4T ODP					
RELEASED		WEG code: 12751143					
REL DT	22.03.2021	WMO Jaragua do Sul	Product Engineering	SHEET	1 / 1		

3 HP 04 Poles 60Hz

A



ZME A3

**NEMA
Premium**

MADE IN MEXICO

MAT: 12751143 CC029A

W01.T00IC0X0N

MODEL 003180T3E182T-SG

15FEV2021 S/N:



PH 3	Hz 60	HP 3.0
FR 182/4T		KW 2.2
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 7.72/3.86
INS CL F AT 80K		SFA 8.88/4.44
AMB 40°C	DES B	SF 1.15
ENCL ODP	CODE K	PF 0.80
USABLE @ 208V 8.54A		RPM 1765
SF1.00		NEMA NOM. EFF 89.5%

ALTERNATE RATING: 3.0HP 50Hz 190-220/380-415V SF1.15
 9.08-8.17/4.54-4.33A 1460RPM EFF 86.7% (IE3) IEC 60034-1

Inverter duty motor For 80Hz use on VPWM 1000:1 VT, 5:1 CT

DE 6206-ZZ ODE 6205-ZZ MOBIL POLYREX EM



T1-BLU T2-WHT
 T3-ORG T4-YEL
 T5-BLK T6-GRY
 T7-PNK T8-RED
 T9-BRK RED

INTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION

WARNING: Motor must be grounded in accordance with local and national electrical codes to prevent serious electrical shocks. Disconnect power source before servicing unit.



AVERTISSEMENT: Le moteur doit être mis à la terre

conformément aux codes électriques locaux et nationaux afin d'éviter tout choc électrique grave. Déconnectez l'alimentation avant l'entretien de la machine.

